Macdonald:

OUR CASE IS BEING DISCUSSED

Dally headlined that Macdonald was to close. If this news practically caused an increased death rate among faculty members, recovery was rapid when the affected realized that Dally was not quite the same thing as Daily . . . Concerned about the fact that jokes could eventually become true, the Harvest asked Dr. Blackwood, Dean of the Faculty, what were the latest developments in settling Macdonald's future.

Said Dr. Blackwood, the College will of course stay open. As to whether we would move downtown or not, "no one is talking about it openly, but it's in the background". A meeting was held in Quebec City on March 25th. Representatives of Macdonald College, McGill U., the ministry of Education (C.E.G.E.P. as well as University section), the ministry of Agriculture as well as people acting on behalf of Mr. Stewart, discussed as to whether a plan following to a certain extent the Kindom report would be accepted, or if it would be preferable to act along the lines of the Douglas report. Although no decision was taken, new developments are bound to

In a recent issue, the McGill come up soon, since time is becoming a definite limiting

> John Abbot College depends entirely on this decision in order to coordinate their future planification. Their lease on the Kirkland campus is expiring in two years, and the administrators would be concerned with having a unified campus.

> We are concerned primarily, said Dr. Blackwood, with adequate facilities for staff and students. Whatever the decision may be, everybody will be more happy with the new state of affairs, in the long run. The campus will be more centralized, and a certain amount of modernization is foreseen. The moving around we will have to go through, although generating incomfort will be done on time for the fall term.

However, the decision ultimately lies in the Minister of Education's hands, who will take, we assume, care of everybody's aspirations. One might worry at the priorities of the government, since their new budget provides for a substantial cut in Agriculture, when we know how important this field is specially today. We only can wait and see .

For Fanatic Geneticists

On April 23rd, Concern (CBC-AM Radio) looks at Science with Dr. David Suzuki, a geneticist who believes that Science has had a mystique for too long and that scientists are responsible for this. According to Suzuki, most scientists cannot explain difficult concepts, because they are incapable of relating to the population at large in simple language. On Concern, Suzuki takes a stab at doing this and along the way, manages to poke a few holes in the aura surrounding stuffy establishment science.

The program includes interviews Suzuki did at the American Association for the Advancement of Science meetings in New York City last January, and an in-studio interview by host Warren Davis on Suzuki himself.

Dr. Suzuki is a professor at University of British Columbia.



The Harvest

VOL. XLVIII- NO. 7 MACDONALD COLLEGE - QUEBEC

Monday, April 7th, 1975

Macdonald conference raises concern

the 20th of March at Macdonald day-round affair was to try to producers, representatives of

The "Opportunities '75 Agri- encompass the problems facing culture" Conference was held on Agriculture today, the possible solutions to these as well as to College of McGill University, in exchange opinions, information Montreal. The object of the and a bit of hope among

government agencies and Agribusiness, students and professors. Speakers from across Canada tried to explain what had gone wrong in the past six months and what they thought would alleviate the current situation.

George Arnold, Agricultural Manager for the Royal Bank, diplomatically warned farmers that although there would be adequate supply of funds, at a rate 1% superior to the prime lending rate, lenders would be asking for more information on the debt carrying capacity of a client rather than his net worth, as traditionally.

Clayton Manness of the Canada Grains Council, from Winnipeg, made several important points after having drawn, brilliantly, the picture of the grain situation. Concerned about the terrible impact that labour strikes could have on domestic and foreign grain trade, Mr. Manness talked rather pessimistically about the coming year for Western grain growers. Although farm cash receipts reached record highs last year in the Prairies, farmers will plant conservative acreages and many will be summer-fallowing because of high input costs and dwindling grain prices. However, the outlook for '75 according to Mr. Manness is: an increased world-wide production of grains, Canada's production increasing marginally, a downfall in world grain trade, a more extensive utilization of domestic feed grains and slightly replenished world Continued on page 3



Deputy Minister Lussier edifying the conference

Now: Plant Scientists Can Feed The World

Dr. Ralph Estey, is Chairman of Plant Pathology and believes science has the answers to the world food crisis. As consultant to a paper mill trying to make its wastes edible he's well-qualified to tell us some of the unorthodox solutions to hunger, as he does below in an article edited from the February edition of The Macdonald Journal

For the past hundred years western man has not been producing food primarily for human consumption. The real incentive has been its profitability, and a shortage of food rather than a surplus has been preferred. When a farmer plans for next year's production, he is inclined to think in terms of its monetary returns rather than in terms of the human need for his product. This is natural, and quite understandable, in a society whose economy

is based on the profit motive. However, when faced with the problem of feeding all of the people who will be on this earth in two or three generations from now, the scientist thinks in terms of the technical possibilities rather than in profits. In this regard it should be comforting to know that science and technology

are already sufficient for the enormous task of controlling this growing population. The major worry of the plant scientist is whether or not the necessary political, religious, economic and other interlocking social decisions will be made in time to prevent needless mass starvation.

Every sane and thoughtful person knows that the present rate of population growth must be controlled or the time will come when there won't be standing room on this earth. Many methods for the control of reproduction are well known but to advocate or compel the use of any one of them is a political, religious or social decision. In other words, the lack of population control is not due to a lack of knowledge. Similarly, any future shortage of food will not be due to a lack of the necessary knowledge for its prevention.

Natural milk without Elsie

Ultimately milk, meat and vegetable alternatives that are nutritionally superior to some of the present day products will be mass produced in multistoried structures over (or under) the market place. These manufactured foods will require less energy

than conventional foods do for their composition and they will be much more precisely tailored to the nutritional needs of those who consume them. For example, it is well known that most adults, particularly those native to tropical countries, cannot digest natural milk.

It is not so well known that a milk substitute can be manufactured from grass - without the intermediate use of the cow that is a more satisfactory food for these people. This is not a kind of synthetic milk of the future but a present-day natural, protein rich product, a product that can be stored indefinitely and needs only the addition of water to make it a wholesome food. Furthermore, about 20 times as much protein can be manufactured from good grass and clover as is now produced in the form of meat or

The United States Department of Agriculture has an experimental factory that is producing a dry, fibre free, white powder from fresh, green alfalfa juice that is nearly 90 per cent protein. The remainder of the alfalfa plant can still be used as a food for ruminant animals.

In regions of the world where it rains every day, seed crops will not ripen and the people there make use of underground parts of plants such as cassava, or bananas and coconuts for food. Except for coconuts, these are low protein foods. Wherever rainfall is heavy, one of the best methods of limiting soil erosion is to grow crops, such as forages, that can be cropped continuously without ever leaving the soil bare. By extracting protein mechanically from the forage more than a ton of dry protein for human use can be produced from each area of land and the fibre that is left over is still a useful fodder for cattle. This type of agriculture and food manufacture would go a long way toward a solution of the proteindeficiency in the diet of millions of people.

by Prof. R. Estey

Tomatoes without soil

Long before a significant amount of food for man is manufactured there will be an intermediate period during which more and more food will be produced by means which seem to be unorthodox by present standards. A step in this direction

Continued on page 3

EDITORIAL

Verisimilitude is the aim of this paper, even though it may appear to be the creation of controversy through the presentation of different viewpoints. This reflects the feminine infestation the paper has suffered — the illusion of improvement!

What this paper needs is several tons of 'Ex-Lax' - but as a compromise, it has been decided that an enthusiastic student body can rectify this rather irregular, spasmotic and constipated atmosphere. We will hopefully supply you with a bi-monthly dosage of intellectual stimulus you need it! We also have visions of a dramatic character change, from crude country bumpkins to cultured and informed country bumpkins. This 'miracle' will be attempted by supplying you the reader, with 'up to the minute-hot off the press' reports on Agricultural and Environmental reports on issues as well as coverage of current cultural events and exposes of the latest scandals. (But we may need a little cooperation from you in this respect . . .).

There are 'classified ads' and there are 'classified' ads - this year the paper will feature both plus anything else you may wish to 'ad'. Our minds are open - but not at both ends, so that your articles may rest assured of unbiased consideration if such a thing is possible for sexist female editors. If you are not happy with us, you could tell us in our NEW 'Letters to the Editors' section; we haven't found a suitable 'Dear Abby' yet, but if you feel you have what it takes, please submit your resume at the C.C. desk. Qualified applicants will be granted an interview. Even if you are not a good 'Dear Abby' person, you might be good at something else - We are sure we could find something for you to do. Who knows, we even might discover a resident 'Kolchack'!

To continue along the same lines as Mr. David Stewart in his Founder's Day speech, you will recall his obvious enthusiasm for the survival of the college. The role of Macdonald in enlightening the public as to the importance of agriculture seemed to be stated as an ultimatum for it's continu-

ance. In concurrence with this viewpoint, we urge you to not only regard the school as a place to get a BSc (Agr), but to also consider its larger role as part of the survival continuum. In this period of uncertainty as to whether our 'world' is sustainable or not, our viewpoints, ethics, and resulting approaches will eventually have an impact on decisions made by governments and industries, although it may not be all that apparent at present. We must make an even greater attempt to bridge the gaps between seemingly opposite factions. We must open the campus to what's going out in Canada and the world. With respect to this, the Harvest may become a very useful 'tool' and we encourage everyone to make full use of it; its potential is unlimited provided it gets the required support. Feedback from past activities as well as information about upcoming events could be termed as one step towards this achievement (greater publicity for not only interior but related exterior events, e.g. Fall Royal, Agricultural exhibitions, Conferences, etc. . . .). Instead of using your paper for lining the wastepaper basket, give it a thorough reading and the thought it merits.

If you don't give us your support, YOU will look just as ludicrous as our attempts. Fight decadence and show us what you're really made of (but please keep it clean)!

In all honesty, (our fingers aren't crossed but our toes are) we will do our best to uphold our rather utopian ideals. We may not be able to let down our hair like Rapunzel did (ours is short), but we are sure that, ingenious as you are, you will find another way to come to our rescue when we run into problems. After all, we're only female - and human at that!

Lucie Desjardins Rosemarie Becker co-editors

B.S. Remember: "Man does not live by words alone, despite the fact that he sometimes has to eat them."

A Stevenson

Thelarvest

Published bi-monthly by the Student Society of Macdonald College. The opinions expressed herein are those of the Editorial Board and not necessarily those of the Students Council.

"Letters to the Editor" published in this paper express the opinions of the writers and not necessarily those of the Educational Board. The deadline for articles - advertisments and reports to be printed in The Harvest is 5:00 p.m. Wednesday evening.

The ad rate for budgeted campus activities is 84 cents per column inch. Nonbudgeted campus activities see Ad Manager.

Editorial Board

Co-editors Lucie Desjardins, Rosemarie Becker Ad Manager Michael Perras

Staff:

Proofreaders: Rosemarie Becker, Lucie Desjardins
Typists: Rosemarie Becker, Lucie Desjardins
Layout: Lucie Desjardins, Rosemarie Becker
Banner by Sally Cooke, inspired by Art Crumb
Photography: Grant Vipond, Diane Benoits, Jovino Santos

The Organic Alternative

Believers in Organic Farming, as an alternative to a highly industrialized agriculture, have often been described as dreamers, utopists, hippies and worse. Which shows exactly how lightly people, and particularly the Scientific Establishment, consider ecological matters. Furthermore, this tendency to bury our heads in the ground and ignore what ecologists are telling us, indicates a dangerous tendency: the inability to question what we are doing. But their views are not so hare-brained. More and more people are taking the organic "revolution" seriously, and among them is one of our professors, here at Mac: Dr. Stuart Hill.

No, Dr. Hill is not a "freak", as many would put it. Actually, he might surprise more than a few with the impressive data he digested on the subject, as well as his sense of humour (quite dry) and a somewhat peaceful countenance. There is no trace of the fanatic in him. Very sedately, he will expose his concerns and rationale as well as the solutions he sees to our problems.

A Question of Objectives

Before examining the means to be taken in order to get anywhere, we must have a good idea of where we are going. This is called goal setting; it is a simple process and will seem very obvious to many. But, in actual fact, it is the step we most often forget to take. As Dr. Hill points out, people get blinded by the means once they've undertaken some task and eventually, the means become the ends. The next trap we fall into, is to put priority on short term objectives and disregard the effects of today's decisions on tomorrow. When asked about their real objectives, people will soon admit that the means they adopt today do not serve, in the long run, the ultimate objective they are following: survival.

At this school, we are primarly concerned with food production. But is food production the main objective? Richard Merrill (The New Alchemists Journal, No. 2), seems to sum up clearly this issue, saying: "The fact that a culture can produce more food on less land with less human toil has been cited by people of many persuasions as a prime example of human "progress". Until recently there has been little reason to challenge this belief. As long as Agriculture produced food for its people and a surplus for foreign exchange, the farm technologies used and the economic incentives encouraging them were justified. The fallacy here lies in the assumption that the only purpose of agriculture is to produce food". Indeed, if we suppose, it might be our primary objective, survival will depend on our capacity to provide for ourselves nutritious foods in a sustainable way i.e. a way that does not deplete our non-renewable resources. It is clear to most people today that using the soil the way we are doing it, is not sustainable. "We are increasingly paying the price for treating land as a commodity rather than as something alive and sacred.' says John Todd, director of the New Alchemy Institute. Our fossil fueis are in short supply, which means that eventually, tractors, fertilizers, pesticides, fungicides and herbicides will become too costly to use on a large scale basis. It has also been shown that all this stuff we add to the soil is actually disrupting its ecology, i.e. depleting it from organic matter, therefore oxygen supply, which is also due to the fact that heavy machinery compacts the

soil, and kills or disrupts the soil fauna. As a side effect, we get water pollution because of leaching, and soil erosion is also increased because there is little organic matter left to retain soil particles. And then again, these hybrid crops we grow require more and more chemicals i.e. they are unable to compete in a natural environment. A vicious cycle . . .

Now, all these means (fertilizers, hybrid crops etc.) are used for one purpose: feed the world more at a least cost. On a short term basis, it means high production in order to reach economic feasibility. But on a long term basis, these means are totally disastrous ecologically as well as economically, politically, socially, etc. If survival is our primary objective, we will soon have to turn around and choose other means to produce food.

The Other Way

Presently, huge monocultures who require extensive use of agricultural chemicals, machinery, as well as transport, storage and marketing facilities, are the common practice. Why not reconsider mixed cultures, smaller farms, organic fertilization, etc? Why do we have to have lettuce or oranges all year round on the table? Why should we be at the mercy of transport strikes? (Massive starvation could occur if, say, the freight from the Prairies would not function for a month, maybe less.)

We could easily have a diet which would vary seasonally. Mixed cultures present the advantage of an increased production through a better use of space (root space for plants in the soil) and time (alternating crops during the growing season). This way, "more can be grown per area and the soil is protected from erosion by wind and rain. The only problem is that it involves more care when planning seeding or planting, cultivating or harvesting" (Companion Plants by Prof. S. Hill, Macdonald Journal, March '75 issue). Certain companion plants can also be used to repel "bad insects and/or attract beneficial ones. There is also much to be said about manure fertilization. The nice thing about manure - let alone its gorgeous smell - is that it releases nitrogen progressively, therefore the leaching is limited and the soil is constantly replenished with organic matter which make life easy for soil fauna, therefore oxygen penetration, decomposition of organic wastes, etc.

Diseases inflicted to our crops by bacterial or fungal infections could be very much reduced, that is would not take epidemic proportions, i.e. if only smaller plots were seeded with one kind of, grain.

Impact on Way of Life

Of course, these little alterations to our actual ways really imply other large scale changes such as, for example, alternative energy sources, deurbanization, etc. Furthermore, they imply changes in our life style, community understanding, consumption patterns, human as well as general values, etc. Mixed cultures, i.e., a more autonomous economy - note: this is not total independence, would bring about the revival of smaller communities. We see with apprehension the rising crime rate here, in Montreal, and we simply think of increasing the police force .

Smaller acreages per farm would mean a better control of the farmer over his land and a more

(Continued on page 8)

Now: Plant Scientists Can Feed The World

(Continued from page 1)

seen in the increasing popularity of hydroponic and similar types of soil-less vegetable culture.

Plastic domed hydroponic units in Ontario are already producing more than 100 tons of superior, pesticide-free tomatoes per acre per year. Under ideal conditions hydroponic gardeners routinely produce at least 12 times more marketable crop per acre than can the average soil gardener. Although the present cost of producing crops without soil is greater, it is not 12 times greater than the cost of similar crops in soil. Tests have shown that hydroponic tomatoes contain more sugar and more vitamin B1, B2 and C than soil-grown tomatoes of the same size and colour. In addition, the hydroponic gardeners claim the taste of their vegetable is so superior that customers are willing to pay higher prices.

Anyhow, cost is not a major consideration when people are hungry, and as the acreage of farmland decreases there will be greater need for soilless culture methods. The amount of vegetables that could be produced under a plastic roof over the Trans-Canada Highway would feed millions of people, and there is no engineering reason why many miles of highways and factories could not have greenhouse-like structures high above them in which soilless gardening could be carried on 12 months of the year. From the standpoint of food production, this is one method of using "waste" space over what may have been good agricultural land.

Waste-paper cornucopia

Relatively little has yet been done to make use of so-called 'wastes'' for the production of food. This is not because of a lack of technical skill but because of economic considerations. Among the most successful ventures in the conversion of waste material to food, from both the practical and the economic standpoint, are those that use the wastes from paper mills.

In Finland a factory is being constructed with the object of

producing 10,000 tons of edible protein per year through the use of a common Paecilomyces fungus. Similar projects, utilizing yeasts and fungi for the conversion of waste forest products to food, are nearing the pilot plant stage of development in Canada. Initially, the vegetable protein produced from these food factories will be used to supplement animal feeds, although, except for its flavour, it is a suitable food for humans.

Many successful experiments have shown that various bacteria, yeasts and other fungi can be used to produce food from waste materials under conditions requiring neither soil nor sunshine at any stage. Some microbes can produce protein 8,000 times faster than cattle and 2,000 times faster than poultry. Moreover, microbial protein that is slightly richer than fishmeal can be easily preserved, for instance by drying, and its shelf-life can be prolonged almost indefinitely. It also has the advantage over fishmeal in being of a constant composition and as reproducible as an industrial product.

Microbial miracles

Microbial protein, and the protein extracted from grass, can now be textured, flavoured and combined with other food materials in such a way as to be good imitations of fish, veal, chicken or cheese. In addition these foods can produce twice as much food calories as chicken and half as many again as steak. Because of its non-shrink properties a pound of textured protein is equivalent in food value to at least two pounds of oven-ready chicken.

Tests at the University of Western Ontario have shown that certain kinds of fungi (related to mushrooms and yeast) grow well when exposed to a mixture of natural gas, mineral water and compressed air. One of the organisms they use is over 50 per cent protein and it can double its mass in about six hours. Compare this to most green plants, which do well to double their mass in six days, or to most animals which, during their best growth period,

require more than 16 days to double their weight.

The ability of microbes to convert various gases to useful foods has been known for many years and this knowledge has led scientists to believe they can use bacteria or fungi to convert the waste or "flare" gas of oil refineries to food. It has been estimated that 100 million tons of this gas is flared off throughout the world each year. Anyone who has ever seen the ever-present flames over oil refineries will have an idea of the amount of wasted energy that could be converted to food from this source

According to the magazine Nature (Nov. 1, 1974) the British Steel Corporation wastes the equivalent of 30 million tons of coal annually. Although waste heat from industries cannot be directly converted to food, it may be used as an inexpensive means of heating greenhouses for year-round food production, or ponds of water to accelerate the growth of fish and water-plants. Scientists at the University of New Brunswick are at present studying ways by which the heat of the proposed Point Lapreau nuclear power plant may be so used.

Sewage, manure goldmines

Fish and algae in well-managed ponds are an excellent means of producing food and of recycling various domestic wastes. In at least two densely populated countries a species of algae found in sewage ponds is already being used as an inexpensive source of valuable chicken feed.

Manure is a waste product of negative value (negative value because of the cost of getting rid of it) in feedlots and other establishments where many animals are kept in relatively confined spaces. Mushrooms, which contain about 37 per cent protein on a dry weight basis, are presently being grown on composted horse manure and other organic materials. Under ideal conditions each square foot of a mushroom bed will produce about 15 pounds, fresh weight, of mushrooms per year and mushroom beds are constructed in layers one over the other. This means that each square foot of 'ground space' can be made to produce as many multiples of 15 pounds as there are stories of mushroom beds.

Food for thought

In the category of "wastes" in relation to food production, many people would include the thousands of acres of good agricultural land that is presently being used for the production of tobacco for smoking and grapes for wine, or remaining idle in the form of cemeteries, lawns, golf courses, etc. Some rethinking of current social values may eventually have to take place, but this should not be necessary in North America for many years to come because there are so many relatively new strategies to be employed for the production of food.

A new era of enzyme engineering was initiated by cornstarch processors in the United States where they developed a method for the conversion of cornstarch, which is in large supply, into fructose for use as an alternative to cane sugar for sweetening beverages. This break-through in the economical use of enzymes is a hopeful sign that plant scientists will soon find a way of converting the cellulose of trees and other plants to foods for human consumption. Cellulose is a renewable resource that could be of almost unlimited supply.

But the greatest untapped source of carbon, for sugars and other energy-rich foods, and of nitrogen for proteins, is in the air that is all around us. The day may come when it will be economical to make much more direct use of basic chemical components for the construction of foods than one can visualize today.

In the meantime the food of man will be met by a combination of traditional agricultural methods, the industrialized use of microorganisms, the culturing of plant and animal cells in complex multistoried food factories completely independent of soil, pesticides, and the vagaries of the weather and by a more enlightened use of present day "wastes".

Macdonald Conference Raises Concern

(Continued from page 1) grain stocks. Mr. Manness, the only Westerner in the assembly, was eager to know easterners' views on the new federal grain policies, implemented since August. Producers claimed being satisified, but also concerned about the premium they have to pay in order to get Prairie grains, which is superior to current freight rates. This would imply that the east would be subsidizing the west . . . No further discussion was made on this subject. Stressing Feed Industry's little control over Feed prices, Mr. Nick Florakas, Executive Vice-President of Ralston Purina Canada Ltd., pointed out that they would be looking more into alternative protein sources in animal rations, in an effort to have a less unstable market to contend with. This was also what Prof. Harper mentioned in his talk on Farm Management. In a hungry world, can we afford to feed human consumption-fit grains to livestock when we could feed them wastes and byproducts of the pulp and paper

industry, etc.? C. L. Friend of the Cdn. Feed

Manufacturers Ass., P. Pariseault of CO-OP Agricole de Granby and R. Coutu of the Quebec Hog Producers Association, all stressed the fact that although the livestock producers in Canada had perhaps a few rough years to face still, they were bound to make substantial profits in a near future, as the dynamics of the market bring input costs in line with prices and/or vice-versa. Mr. J. Stewart, President of Stewart Seeds, encouraged growers to take greatest care in planting this year since input costs are very high. Pedigreed seeds, time and depth of seeding as well as adequate varieties would guarantee better vields.

Representing the Quebec Government, Mr. G. Lussier, Deputy Minister of Agriculture, introduced new policies soon to be passed in legislature which would stabilize farm income in Quebec. This bill was designed to complement the federal bill #C-50. Talking about the Dairy industry and qualifying it as the backbone of Quebec's rural economy, Mr. Lussier encouraged producers to gain a better try and increase the efficiency of their herds. One may wonder at this income stabilization act.

It is a well acknowledged fact in business that if one takes no risks, one does not deserve a

But the most overwhelming speech came from Dr. G. A. McEachern, chairman of both the Agricultural Economics Department of Macdonald College and the Canadian Agricultural Economics Research Council. Insisting on the fact that our present economic situation is a depression (a word most of us dread to use). McEachern warned farmers that their net income this year may very well be 30% lower in comparison to 1974. Referring to the current assumption that Canada produces food for the world, McEachern emphasized the fact that, actually, for the second year in a row, Canada will be a net importer of Agricultural products. Said McEachern, preoccupied with worldwide starvation and malnutrition, "We'll go up together or we'll sink together

Independence is a cruel joke knowledge of the market and to in an interdependent world." A P.E.I. farmer has to know what the potato producer in New

> Brunswick is going to do because it's going to influence him directly. Rougher times are ahead and we'd better face it. We are living beyond our means, insisted the speaker, and we soon will be forced to consider alternative feed sources for animal consumption, to increase our efficiency without failing to consider our natural resources and environment. "Can 8 billion people be fed? . . . Not with todays farming practices here or in the rest of the world. Not with the existing stock of agriculture research and technology . . . Not with the farmers reliance on an unstable world commercial and political system with lack of incentives and commitment for future farmers . . and above all, not with todays farmers." Farmers are desperate for new workable ideas but cuts in budgets for research and college training in Agriculture have been substantial. Supply of sufficient food is the prerequisite to peace

on this planet, said McEachern, and food production is the greatest challenge of mankind in the present conditions.

Many farmers came out of the conference seriously concerned and worried about the future. "I knew the situation was bad but now I feel like selling my farm." Let us hope that all of us will be open enough to accept alternatives to the actual ways as they come. Meanwhile, planting season is near, and coping with this year's problems seems enough for most of us . . .

Lucie Desjardins



The Wildlife Society -

The Wildlife Society is an international professional organization whose members reside in over 60 countries. The majority are residents of North America. Most of those members are employed by either the provincial, state or federal governments or belong to colleges and universities.

The Wildlife Society exists primarily to benefit humanity through professional endeavors. Secondarily, the individual professional benefits, both directly and indirectly, from the Society's programs. The W.S. believes that wildlife is closely related to other natural resources and that wildlife should have a permanent place in our culture. The Society also encourages wisely determined uses and programs to enhance the biological, educational, esthetic, recreational, social and

commercial values of wildlife as part of a complete environment.

The objectives of the W.S. are:
1. To develop and promote sound stewardship of wildlife resources and of the environments upon which wildlife and mankind depend;

2. To undertake an actual role in preventing man-induced environmental degradation;

3. To increase awareness and appreciation of wildlife values;

4. To seek the highest standards in all activities of the wildlife profession.

Here at Macdonald College, there is a student chapter which consists of members of the Society. The basic objectives of the group on campus are to encourage communication between members and non-members of the campus community in order to create better understanding of resources management sciences. Also, try to provide contact between professionals in this field and that of Ecology and provide members a chance to come in contact with those professionals.

During the past year, the membership has been involved in:

- sponsoring speakers in order to widen our horizons;

- occuring more frequently have been chapter get-togethers for group interaction. These usually are concerned with such activities as ice fishing, sheet shooting, and parties in the chalet. At the chalet, we try to have a program which is both interesting and educational.

- Several members of the society have made journeys to other universities to take part in conferences. One group attended a conference at the University of Guelph. A second group attended a society conclave at the University of Connecticut, at the end of February.

- One of the most interesting activity in which the society was involved was a field trip to Texas. After attending the conference in Guelph, 14 students and 2 members of the faculty journeyed to the Welder Wildlife Reserve, outside Corpus Christi. With the approval of the faculty, this field trip was credited as a full course and everyone who spent the long hours driving both ways know it was well worth the effort.

The chapter is based in Main (M113) and if anyone has any questions, just drop in and there should be a member there who

can assist you.

Weldon Smith, President, Macdonald Student Chapter of the Wildlife Society.



Stevie Wonder & Wonderlove

After 30 minutes of Wonderlove 'playing bananas' for Stevie Wonder's concert, I was sitting in the gallery of the Forum, wondering myself if the sound mixing, the arrangements and the repertoire were going to continue this way through the whole show. The band consisted of three female vocalists, a key board, a drummer, bass, two guitars, a sax and a trumpet; still, their 40 minutes introduction only made me realize how uncomfortable the seats in the gallery are.

But after the intermission and a short introduction by the band under dimmed lights, Stevie Wonder comes in singing, led by one of the vocalists, finding his way eventually to the clavinet. From his entree on, I'm sure no one was any longer conscious of time or discomforts. And for the full 21/2 hours, enjoyed a solid show. When quite a few of the favorites had been played, the group left the stage to Stevie Wonder, his voice, and the piano, to perform the next set composed of more mellow songs, including 'It's Magic' from his upcoming album. It always is amazing to see someone singing with such control of their voice, interpreting difficult songs without a single mistake! And suddenly, one realizes that musicians have reappeared gradually on stage.

. At one point, Stevie Wonder takes another 'stage tour' that leads him to a second set of drums which had been sitting, unoccupied from the beginning of the concert. Free to improvise and playing rythms that popped into his head, he gave the themes to his drummer, and there followed a percussion session with influences from African to Brazilian through Caribbean to just plain rock beats.

Finally, the unexpected surprise at the end. While sitting at the clavinet, performing 'Superstition', Wonder is approached by a short bearded, dark-haired man, none else than Cat Stevens, who finds himself sitting at the keyboard to play and sing the tune. So if the dreadful performance of Wonderlove was intentional, so much the better. For it only helped in appreciating a very good concert with a real live feeling to it.

Stephen Hollick

A Plea for Thought

1975 is not finished yet, and NOW is the time to think about Fall Royale '75. More than ever, Macdonald Students and faculty will have to show to the public that they are alive and trying to cope with the world we live in. However, due to the possibility of a move, there will be many problems that will have to be overcome in order to see Fall Royale a reality. We need both students as well as faculty members to help organize this three day open house. It is a

question of survival! If you are interested, please contact the Fall Royale Committee and give us your suggestions for a theme and new activities

There are still three positions on the executive which are open; Director of Societies, Director of Display, and Director of Entertainment. Please give us your nominations with 10 signatures at the C.C. desk before April 9, 1975.

Diane Lyse Benoit (Chairman, Fall Royale '75)

The Gold Key Society

A number of times Gold Key members have been asked "What are those green jackets for?" or something of the like. This is an attempt to answer these questions.

The Gold Key Society is a student society whose members are nominated by each individual class to represent their class. The members serve many functions. They run any elections which may be on campus. They serve as student hosts in official functions

They are availal help out in any student societies. They are doing to become a more for the members are sted in helpin out. Use them!

of the College such as Orientation, Founder's Day, Convocation, etc. While serving these capacities, they wear green jackets as a form of tradition.

They are available at any time to help out in any events which other student societies are organizing. They are doing this in an effort to become a more functional society. The members are people interested in helping other societies out. Use them!

"Say Cheese . . ."

Have you noticed the picture exhibition in the Biology Building on the second floor? Well, if you never did, go and have a look!

These were done by Mac students and you could become just as good as they are with a bit of practice. The photography club will give you an opportunity to learn next year. So come and see what develops in the dark room . . Diane Benoit

(assistant director '75)

Quote

"Lions aren't in danger in Africa, but they are HERE."



Timberrrrr — If It Won't Fall Kick It!

As "Maddog" Perron says "Woodsmen is more fun than playing with German Shepherds." (Most of the other team members are normal!) Woodsmen tend to bring out the strangest things in people; of course what else would you expect at 6:00 in the morning. A fun loving crew that cuts logs, splits wood, throws axes and chops down trees with no tops. And all because they like it.

This year 3 teams of 6 people (2 boys, 1 girls) went to U.N.B. in Ocober and placed 3rd and 15th in the men's division and 2nd in the

women's division. It was a memorable trip to say the least; with the election of 1975 executive of W.A.S. (Woodsmen Alcholic Society). In a hard fought campaign Walter Brown emerged President, with Rick Gilmor as Vice-President and Thomas Mac—Pherson as Secretary-Treasurer.

The true test of Woodsmen came during practices in January with minus 20 degrees weather, howling wind and Bob Watson blowing (instructions of course!). Our practices paid off at the 15th Annual Macdonald Intercollegiate Woodsmen Competition (not

only the biggest in Eastern North America - but also one of the best beer parties.) Of the 33 teams that turned out, the Mac A team placed 1st, the B team placed 4th and the "Ladies" team placed 3rd in the women's division.

We'd like to give special thanks to coach Bob Watson and athletic director Bill Ellyett for their help throughout the year. To everyone on the team this year and all those people who didn't try out - come on out next year and have a hell of a good time!

Karen Axen

And Out of Your Activity Fees, \$1.00 Came to Us

You may have noticed the signs around - with the small print that reads A.U.S. - that's us, the Agricultural Undergraduate Society. Some lucky person will end up in Vancouver, B.C. for a week - provided they accept the job.

To gaze into the crystal ball and read the past of our little (and that is the word) group is actually quite interesting.

We started off with several ambitious projects - some of which got done, others which were formulated as time went on and the 'needs' arose, and others which, unfortunately got left behind in the suffle. We were (oh, if you only knew!!) going to have stickers for all those illegally parked cars - fortunately for you rotten parkers, there was trouble getting the supplier to do things exactly as specified, and by the time they arrived, it was actually too late. Now you've been warned - don't be surprised if next semester you come out and discover

Another project which we started was the course evaluation idea. Members of the group collected data on evaluations from different places, and started work on forming one for Mac. Now that we've done the research and made all the recommendations, the project has been passed onto Student's Council, who will hopefully help us out by lending their support and get it on the road so that it will eventually get to you, (on time, we hope).

We brought in a film, but no-one ever saw it, mainly because details turned out to be unsettled and the manpower required to make the publicity work, presentation, and preparation a success fell through. I won't tell you what film it was, but I will tell you that it was good and you should be sorry that you missed it. Maybe we can give it a try and actually succeed this time. We are certainly not defeatists in this group!

For those of you with a sweet tooth, thoughts of having a Sugaring party (first come, first served) next year have been expressed. If you are ruled by your stomach this might also be some temptation to come and find out what we do. Lastly, if you have never been to one and don't know what we are talking about then you had definitely better show up and get informed. Besides that, it promises to be a lot of fun, if we can get it off the ground

Are you in the job market? We had (and still have) jobs coming at times, especially those in relation to Agriculture. Representatives from Mac went to the International Salon of Food and Agriculture (as hosts) for the period of October 29 - November 3rd. We were also asked to make a float for the parade, but enthusiastic people failed to show up and Mac never did get its chance to be 'seen'.

One of our failures was an attempt to get the Xerox machine in the library back down to 5 cents - although we wrote letters of protest to several people it seems that more than protests is required (personally I suggest everyone use the machines in Jac, Ag, or some other department where they are 5 and 6 cents respectively).

Were you one of the people who went to the square dance, drank 'Caribou', danced, and generally had a good time? You might be interested to know that the backing for the Rural Youth who put on this event came directly from us. We are pleased to be able to say this because it is apparent that it was a success, and everyone enjoyed themselves. This in itself is one of our aims - to help the Ag students in whatever means we can, if we can say that it is by giving them a break from the routine suffered, then we darn well do! The Association Party, which had a more restricted attendance, was also our responsibility and we like to think that we covered most aspects involved in it fairly well food, music, and drink - what more could you expect? We had thought up some 'entertainment', but the crowd seemed to be so busy with other things that it was warranted unnecessary. However, in all fairness, if you feel that something was 'not quite right', or could have been

improved, please let us know. Without constructive criticism, we can never hope to improve.

Do you spend breakfast with one hand on your toast, and another grasping your newspaper which you are trying to keep straight so you can read the sports, or the weather, or the latest propaganda, or whatever?

If so, maybe, just by chance, if you are a reader if nay of 'La Terre', 'La Presse', 'The Gazette', or 'The Montreal Star', you might have come across an article on Mac with respect to the Kingdom Report which was written by certain members of our group. We stand up for what we believe in, and let others know it as well. After all, somebody has to do it.

I suppose I could ramble on about all the other things we do, but I think that by now you have a pretty fair idea of what goes on here. Just as a final remark, I would like to tell you that come the fall, openings in a number of positions on the Executive will be there to be filled.

Don't you think it's time that you got involved?

R. Becker

"CLASSIFIED"

ADS

To: The Mystery Ad-Writer: Honey-chile, I've spent all my summers below that - there parallel.

D.D

B.W.: Why is your bed wet at 2 a.m. on Thursday nights?

To our friend the Artist: fish nets are definitely "in" this Easter.

Wanted (dead or alive): Cats of all sizes, shapes, and colours. Apply 25 Maple.

W.S.: The Boys have decided to award you the 'Ezekiel Hortense P. Goodbody Award' for excellence in the field of viewing the femmes of Mac. Your technique is beyond the reach (thankfully) of a lot of females.

The pigeons of Mac.

Just for Pete: Another dinner - another leg show.

To Gramma Mit: We are pleased to announce that you have been accepted for membership to the 'West Island Little Old Grandmother Society for the Propogation of Crocheting Vending Machine Covers'.

Local 239 of Grandmothers of Canada.

RM & DM: Brownies do not permanently disable (quote from an eminent physician - Dr. Hardrod).

Notice: New Chinese Restaurant now open at 25 Maple.

Mouse: I didn't think you would, but you did, and then some!

One who was there.

To R.B.: This is to inform you that quiet hours are from 8 p.m. to 8

Sincerely, B.C. Sunshine

Yves: You don't have to imitate the Victorian court women - I hereby grant you permission to comb your hair at least once in a while.

'Keener'

Nameless: It seems to have been a while since your presence has been noted. Rumour has it that you are actually working. I suggest you take 2 aspirins and lie down until the feeling passes.

I pass up acknowledgement.

Group of Seven - What's that,

a new mouthwash?

K.K.: you is in a heap 'o trouble. No longer shall I be "Mr. Nice Guy". This doesn't mean you the other KK, the one that owes me a coffee.

George: Hope the wife doesn't cramp your style.

P.N.: Chez le Manoir: You can dress the man up but you can't take him anywhere.

To Roscoe: Yo'all did not show up for de showdown dat I challenged yuz to. Dis is to inform you dat in

view of raw material shortages within our country I will have to resort to another weapon. Ah hereby challenge y'all to a duel using venom filled water pistols at 20 sanke lengths.

Signed 'The Snake'

To M: How did you get the garlic out of your hair?

Shep: Is West Virginia REALLY for lovers!

K.K.: Try standing still for 5 minutes once in a while - it beats flaking out for hours at a time.

Another activist

Bert: No matter how you fight it it's a losing (and rather hopeless) case, so why not submit?

Public notice: The 'Great White Stud' (P.N.) has returned from tapping trees to further test his virility (It could be sapped !!!).

D.D.: We, the anonymous members of Brittain Hall are thankful for the fact that you are not so enthusiastic as in the previous year to protect the morals of the girls of Stewart Hall. We all know you ain't "Miss Goody Two Shoes" but rather "Ms Rotten Two Fist".

The battered bums of Brittain

To W.S.: My God - you not only can spell, but even construct sentences (sometimes)!

Amazeo

To Burt: We, the members of 'The Harvest' editorial staff composed of one very mistreated typewriter, a battered pencil, a beer drenched paper and a beaten chair, regret that you will no longer be amongst us. No longer shall we be subjected to 13th hour editorials composed in the dark recesses under the table of the Bar-Disco. No longer shall you come up to me and pound my keys away in a disorganized and frustrated manner; no longer shall you sop up the beer off the table with future Editorials, and no longer shall you chew me and mutilate me to the extent that I am no longer recognizable as the instrument of illustrating your somewhat infrequent genius and blazing personality (I am being forced to write this against my will). However, in spite of all the good things we've said about you, we will still somewhat miss your blurred affection for the rag that you produced.

The Silent Editorial Backup Team

Wanted: Apt., 1 ½ - 3 ½. Call Tim at 457-6580. Loc. 238, 239 or 457-5254 Rm. 514.

Anything to buy, sell, searching for, etc. This is the place to let others know about it.

The Rat: It is now 2 a.m. (and unfinished work is piled all over).

That last laugh still rankles, and the temptations to pick up the phone and dial a certain number are very hard to fight off. Why we don't is a mystery to be solved.

2 tired but undefeated people.

It Could Only Happen at Mac

The old fashioned ways of glamour and romance are all but gone with the exception of the facimilie of the popular 'Strip' as performed by an outstanding extrovert at Thursday's Broomball Tournament. This action evoked mooning responses from other members, much to the delight of those admiring the proceedings from the vantage point offered by the rafters. Yes, this was definitely not your run-of-the-mill broomball tournament . . .

The beer seemed to bring out the 'real' person in the players, along with other unexpected attractions (or distractions) as the case may have been. Things were really moving along during the first portion of the tourney - and it took a while for them to 'cool down'

Some of the tactics exhibited by members of the various teams are so unique that to neglect their mention, would be to deprive the community of a vast deal of distorted knowledge. One of the most unique offensive tactics exhibited that period in the early morning hours was noted during the U3-U1 game, when a U1 male decided that his best offensive was to grab his opposing female U3 defensemen and render her helpless with an alcoholic kiss. This appeared to become quite popular for when U1 succeeded in scoring a goal, another member of the team rewarded their goalie with the same U3 then decided that it was time the 'oldsters' showed the 'youngsters' how to play, with the result that the game ended with a score of 3-2 for U3. Wait two more years you U1'ers. U3 celebrated their achievement by giving the old phone booth routine a new twist they tried to fit all members into the U1 goal net . . . arms, legs, everywhere.

The staff goalie looked very flashy in his purple shirt and green and yellow pants, but it was obvious that the beer had taken its toll on him as at times he was noted to frantically sweep the area of ice directly in front of his . Dear Sir: the game is (was) Broomball, not Curling. U2 tried to illustrate their mastery of the situation by performing various stupifying stunts such as rolling the ball up and down the backs of staff when they weren't looking, and bouncing it off their elbows and knees when they failed to follow the 'conventional' methods. It is of interest to note that at half-time (or whatever it was) the front line for U2 consisted of three Woodsmen. This alteration evoked a 'walk out to mid-line' response coupled with the added attraction of defiant, unmusical but attempted co-ordinated belches from the Staff goalie. All this did not help him, however, when U2 scored a goal, and he ended up in defeat over his goalpost. U2 (yea!) revealed their mastery with a final score of 2:0.

When playing the Dips, U3 decided on another equally unique form, which appeared to consist of a hard shot (no, not of beer) followed by a defensive lay down all over the ice. The Dips soon caught on however, and altered this to suit their own needs by falling down prior to hitting the ball; this was coupled with a hard running and shooting spirit. B. Clark was hard put to distinguish his 'Jack-rabbit' tendencies for skill of swiftness, so supplemented it by aggressiveness, especially near the U3 goal post. I wonder if any of the Wildlifers could state a form of behaviour that this could characterize . .? It appeared that Noodles wanted to show he could be just as aggressive as Bob, but somehow he overestimated his

capabilities, and ended up expelled from play for fighting. All in all, both teams appeared to press each other, and the final score of 0:0 showed how hard they did just that.

The Post-Grads tired to prove the truth behind the old saying 'You don't get older, you get better' by literally running over their opponents, or failing this pushing them or tripping them over well-placed sticks (or brooms rather). At times, things seemed a bit confused, for everyone appeared to line up along on line on the ice and zoom along in one direction 'en masse'. Perhaps plans had been made to do this in the form of a synchoronized can-can, and thus disorient the opponent, but in the heat of play this never did occur. Perhaps this was the reason why one member of the U1 team attempted to vault over the boards, and failing this returned to the ice in a rather undignified manner. Whatever the hidden tactics, U1 was not phased and won the game 1:0.

Staff decided to learn from their mistakes and on their next game felt that 'THE way' to use the broom was to run down the ice, ballerina style, twirling it in the fashion of a baton. When he wasn't lurching about, the Staff goalie was very busy slamming opponents into the boards. Perhaps this was his way of competing with Rick who continued to use his head as a landing area for centering his falls. Bob revealed his hidden reserves of energy by running about like a disoriented chicken, except that by some miracle he seemed to be in approximately the right area at the right time. Of special merit is Wally's entrance onto the ice - his classical arabesque was terminated rather abruptly when he slipped and landed face first on the ice (fortunately not to the detriment of his personage). It is also of interest to note that Staff was still borrowing from other 'successful' teams, and one member showed preference to play on his back and side; perhaps this was a modification gleened from one of the previous games. Whatever the case, whether or not the special techniques were the reason, the end result was a game of 0:0.

Since the U3's had a female player, the U2's decided not to be outdone, and showed that they could put in a girl too - and as goalie on top of that. The game took a turn for the bizzare, as techniques turned to such aspects as bouncing the ball off the end and the top of the net. It seemed that putting K.K. in nets maybe wasn't such a good idea . . . the ball seemed to be down there all the time. Crushes were frequent in this vicinity, and some quick action by Ron averted a few might-have-been goals when the goalie became disoriented. This was especially fortunate when she rushed out to stop a long shot, and ended up tripping over the onrushing Dips. Even Herbie's toughness was put to the test as he repeatedly was forced into the boards and other players. The fast running of the Dips caused the U2's to slow down the game in the only manner they deemed fit by hitting the ball out of bounds. Ken took out his frustration of creating an ideal for the U1's inspiration out of a beer pyramid only to see it destroyed by handing some hard shots down the line to the Dips. However, the Dip goalie, B. Irving proved himself to be quite a capable fellow and managed to avert the balls. For sensationalism at the net, however, he failed, for

(Continued on page 7)



The first drop of sap is a sign of spring and the promise of a harvest yet to come.

Root-Mobile – Construction in 8 Easy Steps

Step 1: Dig up roots. This may harder than you think, so don't art with trees in the hundred year bracket. Stick to the annual or small biannual plants till you get the hang of getting the roots up in one piece. The more root hairs you exhume, the classier the final effect. Cut the stem a few inches above the root system. You can trim it later; it makes a good handle while you clean or paint the roots, and also to hang the mobile up with. You need for this mobile six roots at least.

Step 2: Cleaning the roots of small particles and debris can be done with a small brush. Do a thorough job, or else you will constantly be dusting under your root-mobile. If the soil is very wet or if you are and clingy. mangling your roots by brushing them to death, try swishing them about in a pail of water to get most of the soil out.

Step 3: The next step is optional, that is, you can either hang up the roots to dry by a string or a clothespin, or you can get very artsy and do things to them before you let them stiffen up. Here are some suggestions: a) If you are handy with a knife, or can be trusted with anything sharper than a butterknife, you may want to try to knotch designs into the bark. b) Spread roots on pieces of wood or heavy cardboard and pin or tack them in the shapes you want them to dry in. It may be quite an effort to pin big roots, but the trouble you go through will be worth the results. Once dried, the roots will no longer be flexible and their shape is permanent.

Step 4: When the roots are thoroughly dry - this may take several days depending on the weather and the thickness of the roots - you may want to paint or decorate them. Again, an artist could have a field day, but if you are less endowed in this respect, give them the old monocolour treatment, and follow up with some varnish. You'll find that spray cans are handy, but not essential.

Step 5: While your roots are drying, you can get busy collecting the rest of the mobile material. You need a string; strength is proportional to the weight of the mobile. If you have not followed my suggestion, and envision suspending a few gigantic roots, find yourself some heavy rope or some wire. You also need some branches of different lengths, whose decoration I leave to your imagination. If your roots are heavy, the branches to support them should be strong enough.

Step 6: This step can easily be your undoing. It is necessary to make holes large enough to pass the string (rope, chain, whatever) through, at both ends of the branches and the upper parts of the roots. If you don't have a drill, you may have to punch holes through with a hammer and a nail and risk splitting the wood - be

Step 7: Stringing a mobile together is a tricky business - if you put a hook into the ceiling where you are to hang the finished product, this may be of some help. Look up at the hook once in awhile, whilst you are juggling with the string. This may give you the incentive to continue.

Step 8: Balance is defined as: a) Bringing to a state or position of equipose; b) bringing into harmony or proportion; c) something left over, remainder. Forget the remainder bit - don't waste one of your hard earned roots so lovingly

dug up, so skillfully dried, so artistically painted, concentrate on the harmony and the equipose. Suspend the smaller roots from the ends of the smaller branches, and the centre of balance of the smallest branch to the middle of the branch of the next size up. Continue in this manner. Always vary the length of strings till the roots of one layer clear the branch

Don't be too proud to ask for help. Good luck!

Plantus Mobilus

It Could Only Happen

(Continued from page 6) nothing could compete when in a tense crush at the U2 net, the goalie was saved from a potential goal (yes, the ball wa IN) by a

Although I have to admit that I left before the termination (and who knows, might have missed the grand finale), come 4 a.m. my powers of observation had deteriorated to such a point that rather than distort things more than I already had, the best solution was to have another beer and laugh all the way home.

R. Becker

MEN'S WEAR L.P. Brunet 57 STE-ANNE ST. 457-2477

Apathy is The Problem

Intramurals — For Girls?

This is the year of women's liberation. But here, at Macdonald, women are too concerned about their own problems to come out of their shells and enjoy life.

In the last three of my five years here, I have been involved with the Women's Athletic Association - but to no avail. Apathy is the problem. Various sport programs are organized and girls are rounded up for teams;

Letters to the Editors

Dearest Readers: We hope that you have survived the traumatic (at least for us) birth of our "child". We will probably treasure this issue more than any others simply because it is almost all ours. Like everything else in this world such a state is essentially transient. Our sentiments at this moment (it is 2 a.m.) cannot be expressed in the normal way, thus we have regressed to the occular state. R.B. & L.D.

but come the final gun, there is neither hide nor tail of the supposed competitions.

Why is this happening here? Along with losing grip on our campus, we, girls, are losing grip on one of the most important aspects of life: PARTICIPATION.

Not only for well-deserved exercise, which we can all afford, but to get out and participate in all organized activity.

I suggest that we all wake up and liberate ourselves from our own litle world and start getting involved with a campus activity; intramural sports.

> Marg Waye, chairman of the W.A.A.





Don't Throw Away Your Garbage — Maybe We Can Recycle It

The girl from across the hall asked me if I would save my potato peelings, fruit peelings, old lettuce, and other such items for her. Although the action did not disturb me, I was curious to know the reasoning behind the request. The answer was relatively simple — she was taking Dr. Hill's organic gardening course, and wanted the materials to use as 'compost' for her plants. I began hoarding 'organic wastes' . . .

Although I must admit to a relatively poor background when it comes to the theory behind organic farming practices, it is apparent that others have given not only this, but several other 'natural' aspects a great deal of consideration. What is more, they have proven that it is a feasibly superior (even economically) alternative to some of today's 'fashionable', if I may use the term, methods.

John H. Todd & William O. McLarney are the founders of "New Alchemy Institute" in Cape Cod, and are investigating alternate methods of feeding the population without excessive reliance on fertilizers, pesticides, coal, oil, or hybrid grains.

Using 12 acres of land near Falmouth, and a capital of \$2,300 (for building and stocking), the focus of the project is a counter-revolution to the failing 'Green Revolution'. The set-up is essentially an agriculturally self-sufficient food producing complex utilizing greenhouses, fish ponds, slar heaters, and the picturesque but highly functional windmill.

The three greenhouse covered ponds are built on an incline, the

lowest boasting the existence of edible fish (tilapia). From here, the water is pumped (by the windmill) through a solar heater, then circulated through crushed bacteria laden shells in the uppermost pond. The bacteria detoxify wastes, converting ammonia to nitrites & Nitrates which fertilize algae in another part of the pond. This algae water is then circulated to the central pond as food for daphnids water fleas) which in turn return as full diet to the tilapia in the lowest pond.

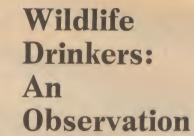
In the space above the ponds are grown vegetables, fertilized by the fish water. Pests are controlled by frogs, spiders, and chameleons.

As if this efficiency was insufficient, results have been proportionally stupendous. The main 8,000 gal. tank produced 2 crops of fish, surpassing that of aquaculture ponds in China.

It seems that the approach has been deemed worthy of notice, if somewhat hindered by skepticism, for several foundations appear to be lending support. One of these is the Rockefeller Brothers Fund Inc.

As a final clincher, the nationalistic spirit is showing! Todd has plans for another institute (or ark as they prefer to call it) on Prince Edward Island. With our Canadian know-how, and enthusiasm, I see no reason why we shouldn't outdo those already established in Pescadero (Calif.) or Costa Rica. As a contest, the prizes would certainly be of benefit to all concerned.

R. Becker



By our beloved Ex-Editor, Lambert Hogenbirk

Wildlifers are notorious for their penchant for women and the golden draught of life (alias beer!). Yet, few people understand why the wildlifer places such important emphasis on these basic necessities. For the first one, women, it is not necessary to explain why they are essential. However, the habit of going to the tavern or the Bar-Disco must be clarified, due to the gross misconceptions that lie in the minds of many non-wildlifers.

The primary reason is to get away from shop-talk, enjoy the company of others and, above all, quench one's thirst. Now that I've finished the explanation of why we, wildlifers, have such a favourable attitude towards the golden elixir, it is time for me to divulge the secret method by which one can gauge how many beers a wildlifer has had.

1-2 beers — Topic of Discussion - Women & Sex: quite a lot of thinking, concentration and strategy required.

3-4 beers — Topic of Discussion - Sports: less thought and concentration required.

5-7 beers — Topic of Discussion - Experiences: the now higher level of alcohol enhances the memory cell capacity and thus enables one to recollect the past much more vividly. (note: very little thinking involved.).

7-10 beers — Topic of Discussion - Shop Talk: the discussion has now degraded to the point of talking shop which requires almost no thinking at all.

10-00 beers — Topic of Discussion - Politics: This is the lowest and most degrading topic of discussion; it requires one to exert no effort in the thought process.

Thus you can, by virtue of this chart, be able to establish within reason, the # of beers that a wildlifer has consumed.



"No matter how hard you try, you'll never know EVERYTHING!"

The Organic Alternative

(Continued from page 2)

efficient use of his capacities. 'The ability of an individual to çare is stretched with size. The larger the unit, the harder it is to control. It is not our abilities which are questioned, but rather the control of our abilities." will says Dr. Hill. Farmers of daysgone-by would tour their fields before breakfast and register in their heads what was to be done. They had this intuitive and intimate contact with the land which made it easy for them to produce. Not all farmers were good farmers then either! We are not trying to revive the past. But we may have to turn our gaze towards yesterday to see exactly where we went wrong, and to learn as well what was positive then which we have stopped

To implement desirable changes, communicating concerns, opinions, information and solutions is perhaps the first step. People who operate hobby farms during the summer eventually become more experienced in farming and many decide to leave the gloomy cities to live a more wholesome life on the land. Some farmers curse the day city people got into this fad, but others see it

as a positive change from the disastrous trend of young people who increasingly leave the family farm. Perhaps hobby farms or some sort of similar project would help city people become less alienated from rural life.

Dr. Hill does not think he has all the solutions. They are the answers which seem the best for today, according to the existing data. What I admire about him, is that he is taking a position which is highly controversial and he has to meet with a lot of skepticism, criticism and just plain apathy. The truth is that people don't want to hear about it; it is too disturbing. We, as scientists "en herbe", are aware of ecological problems and of their urgency. We know our present system is not sustainable. We know we should do something about it. But it's challenging (too much?) to take a stand and become involved. It means fighting our way against the current. And we hate discomfort. So comfortable to take a critical, outside approach, to be uninvolved, aloof. But can we afford this attitude very long?

It's everybody's decision . . . by Lucie Desjardins





What young fellow could resist an opportunity to hang sap buckets on a warm, sunny spring day.

Dr. Silverstone's Column

In terms of and in relation to, but keeping in mind, not forgetting, with regard to, the importance of this issue is only eclipsed by the impending dissertation of redeeming social values inherent to the unacceptable fact that this is International Women's Year.

Considering that current trends are such that those in control have become bullish on the market, ignoring the fact, when communism is on the upswing, while restraining from the extreme, realizing that the world is indeed round and not necessarily flat, noted first by Charles Darwin in Newfoundland at the end of the fiscal year.

Gentlemen? In re: to yours of the 15th, is this the way it must go, are we indeed committed to this path, is there no room for change, and if so, why not, seize the bull by the tail and face the situation wide-eyed.

Because of the purposelessness of this dilemma, we will draw conclusions and study the implications next issue, so stay tuned!